

1889-6008

SHEET 1.

51  
76

British  
Britain

51. Grinding & Polishing  
Metal.  
Cutlery Scourers. 188

FIG. 1.

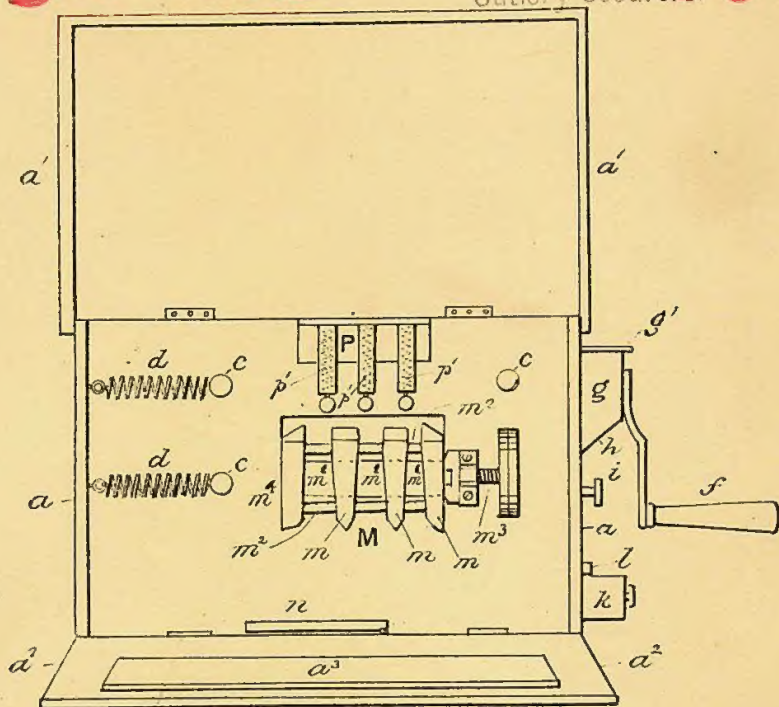
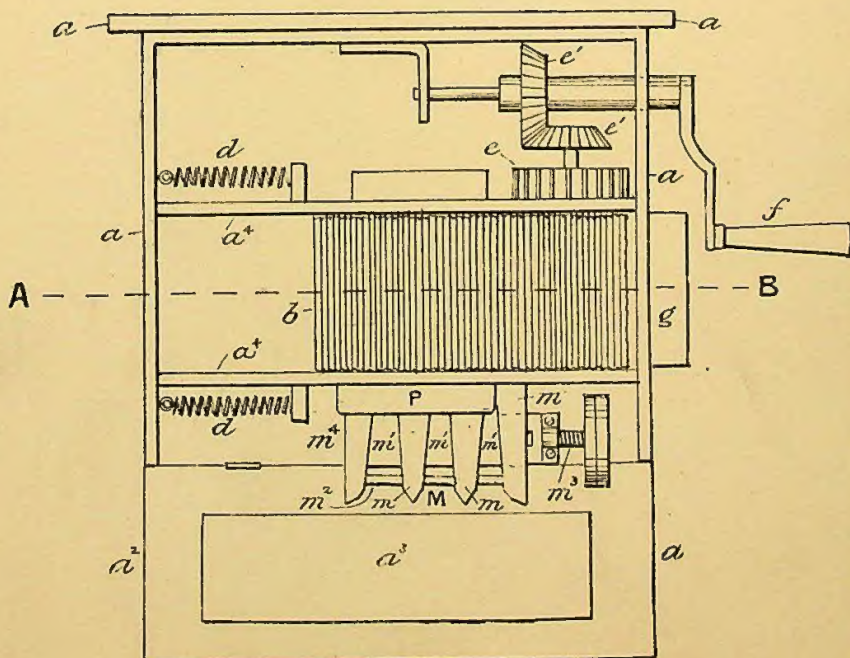


FIG. 2.





1889 - # 6008

(2 SHEETS)

SHEET 2.

51. Grinding & Polishing.  
Metal.  
Cutlery Stouers.

White

FIG. 3.

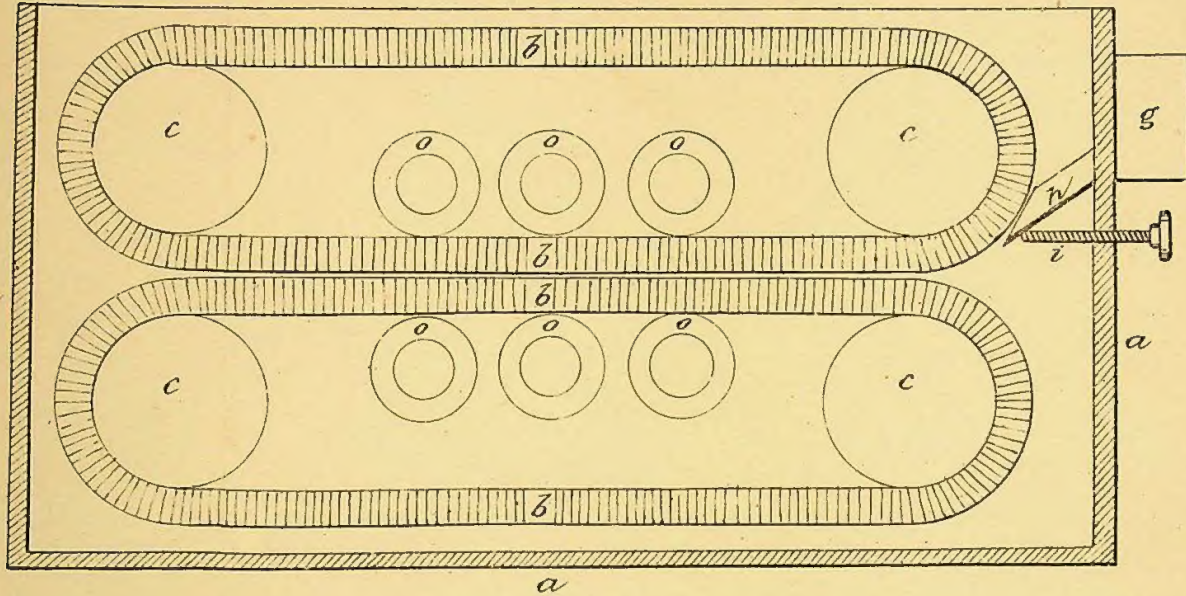
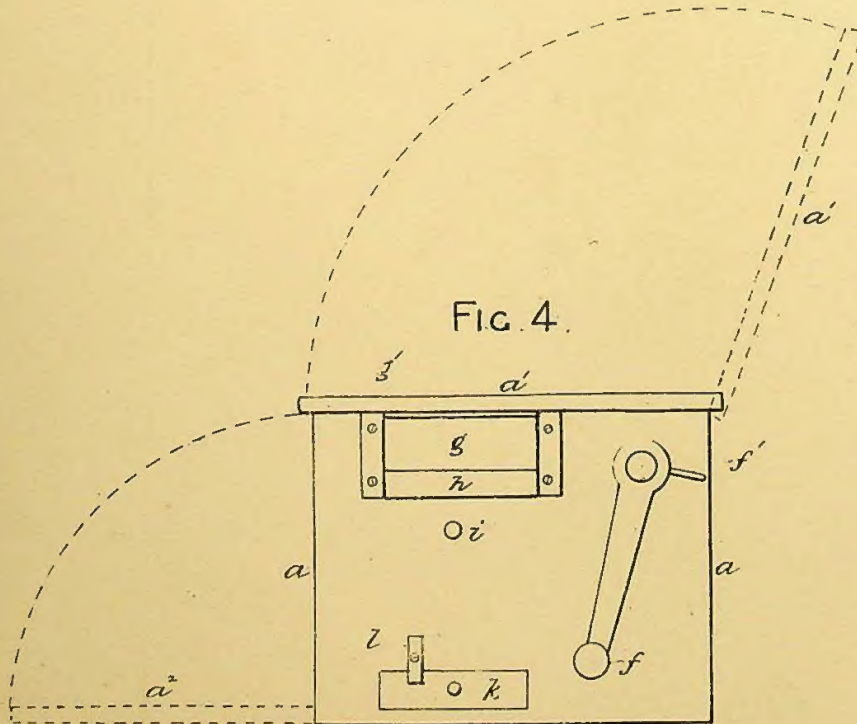


FIG. 4.



[This Drawing is a reproduction of the Original on a reduced scale.]



GB 000006008 A  
APR 1890

Cutlery Scourer 27

N° 6008



A.D. 1889

Date of Application, 8th Apr., 1889

Complete Specification Left, 25th Jan., 1890—Accepted, 5th Apr., 1890

## PROVISIONAL SPECIFICATION.

## An Improved Knife-cleaning Machine.

I HENRY WHITE of Grantham House Putney Heath London S.W. Engineer, do hereby declare the nature of this invention to be as follows :—

- My improved machine consists of a suitable casing wherein are mounted two revolving brushes made of a combination of leather and fibre and so arranged that they clean the knives by friction thus avoiding injury both to the handles and blades. The machine is fitted with an adjustable slide so as to allow any sized knife to be cleaned therein. This slide is so fitted that it firmly grips the shoulder of the blade thereby dispensing with the grip on the handle and leaving the latter free from pressure.
- The machine is so simple in construction and perfect in its working that any person can work it with the greatest ease.

Dated this 8th day of April 1889.

ELT &amp; Co.,

33, Southampton Buildings, Holborn, London, Agents for the Applicant.

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## COMPLETE SPECIFICATION.

## An Improved Knife-cleaning Machine.

- I, HENRY WHITE of Grantham House Putney Heath London S.W. Engineer do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

This invention has for its object to produce a portable knife cleaning machine which is simple in construction and effective in action, and which possesses the advantage of not injuring the handles of the knives when cleaned therein.

- Fig. 1 of the accompanying drawings is a front elevation, Fig. 2 a plan, Fig. 3 a section, taken on the line A B Fig. 2, and Fig. 4 an end elevation, of such improved machine. Similar letters of reference indicate corresponding parts in all the views.

- My improved knife cleaning machine consists of a case *a* fitted at top with a fixed or hinged lid *a*<sup>1</sup> and in front with a fall down flap *a*<sup>2</sup> which has a leather facing *a*<sup>3</sup> whereon to polish the knife blade after it has been cleaned in the machine. Mounted in this case between two divisions *a*<sup>4</sup> are two revolving endless brushes *b*, working over rollers *c*, fitted with suitable tension springs *d*, which keep the brushes taut. The brushes are made of strips of leather sewn transversely edgewise on a suitable foundation. Or they may be made partly of leather and partly of bristles. The rollers carrying such brushes are actuated by cog and bevel gearing *e*, *e*<sup>1</sup>, preferably fitted in the back of the casing as shewn in the Drawings; and operated by a shifting crank handle *f*, which is secured to the spindle of the bevel gearing by a pin *f*<sup>1</sup>; so that such handle can be taken off and packed inside the case when required. A hopper *g*, furnished with a lid *g*<sup>1</sup>, to prevent the dust escaping therefrom, is fitted at one end of the case, through which powder is fed into the machine. The bottom of this hopper is fitted internally with an adjustable flap *h*, which is regulated by a screw *i*, so that the supply of powder to the machine can be increased or diminished as desired. A sliding tray *k*, is fitted at the bottom of the machine, to receive the dust and dirt created thereby. This tray can be removed and cleaned out from time to time as occasion requires, thus keeping the machine clean. Such tray is secured with a button *l*, or its equivalent, to prevent its working loose with the vibration of the machine when at work.

[Price 6d.]



*White's Improved Knife-cleaning Machine.*

An important feature of my invention consists in avoiding injuring the handles of the knives as now so frequently occurs with existing machines. For this purpose I fit the front of the machine with a fall down adjustable sliding rack M, wherein the handles of the knives are placed and firmly held. Such rack consists of a series of fingers or guards  $m$ , mounted on a suitable base plate  $m^1$ , and carried by bolts  $m^2$ , 5 whereon the intermediate fingers or guards work to and fro by means of an adjusting screw  $m^3$ ; or they may be actuated by a spring and sliding action. The outer finger or guard  $m^4$  is rigid and forms a bearing for the tie bolts. By operating the adjusting screw  $m^3$  the spaces between the grooved fingers or guards are regulated to suit any sized handles. When the knives are placed in the rack each knife is 10 tightly gripped by the shoulder of the blade just above the handle, thus avoiding all strain or pressure on the handle, and so obviating injury thereto and preventing its being loosened from the tang. This is a very great advantage as it enables silver handled and other superior cutlery to be cleaned by the machine as readily as ordinary knives. Such adjustable sliding rack is fastened by hinges, (not shewn in the 15 Drawings), to the front division of the case so that it shuts down when the machine is not in use thus allowing the case to be closed. The base plate  $m^1$  is held in position by screws which fasten it to the upper hinge. When the rack is in use it is supported by a hinged upright  $n$  screwed to the bottom of the case which can either be raised to a vertical, or folded down in a horizontal position as required. 20

In order to ensure sufficient pressure being brought on the blades of the knives to clean the same when placed between the brushes, I fit both the upper and lower brushes with pressure rollers  $o$ , the upper series whereof work in a contrary direction to the lower series.

The divisions  $a^4$  form bearings wherein the spindles of these pressure rollers are 25 carried. The lower rollers are so mounted therein, as to keep the bottom brush close up to, and in contact with, the lower side of the knife blade; while the upper rollers are so placed, as to keep the top brush pressed down upon, and in contact with, the upper surface of such blade. The spindles of the upper rollers project slightly through both the divisions  $a^4$  and are fitted in tubular frames  $p$ , which are fastened to such 30 divisions, and furnished with spiral springs  $p^1$ , which allow sufficient play to such upper rollers, to permit the brushes to work freely over the blades of the knives.

The fall down flap and lid are fitted with hooks and eyes or any other suitable fastening, so that when the machine is not in use, it can be shut up and put away in 35 any convenient place; as it does not require any permanent fixing.

Its construction is so simple that a child can work it, and owing to the continuous friction over and under the blades of the knives, they are cleaned more quickly and efficiently than in any other existing machine. If desired it can be made wide enough to put knives in at both sides, thus cleaning double the number of knives at the same 40 time, and in less space than in any machine now in use. The machine is also much lighter and therefore far more convenient than the ordinary machines.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is

The improved portable knife cleaning machine constructed, arranged, and fitted, 45 all substantially as hereinbefore described and shewn.

Dated this 25th day of January 1890.

ELT & Co.,

33, Southampton Buildings, Holborn, London, Agents for Applicant.